Claims

1. A self test system for a medical device said medical device being arranged to send information concerning components of said medical device to an indicator which can show the status of the components when tested, characterised in that the self test system comprises one or more self test units which can self test one or more individual components of the medical device, the self test being activated independently of operation of the medical device and not by a signal from a processor associated with said medical device.

2. A self test system for a medical device according to claim 1, wherein the self test is activated independently of operation of the medical device and not by a signal from the centralized processor associated with said medical device.

3. A self test system for a medical device according to claim 1 or claim 2, wherein the self test system includes a summator which receives data from the one or more self test units about said components, the summator storing said data so that it can be transmitted to an indicator either directly or via a processor which can access said data.

4. A self test system for a medical device said medical device being arranged to transmit information concerning components of said medical device to an indicator which can show the status of the components when tested, characterised in that the self test system comprises one or more self test units which can self test one or more individual components of the medical device and a summator which receives data from the one or more self test units about said components, the summator storing said data so that it can be transmitted to an indicator either directly or via a processor which can access said data.

5. A self test system according to any preceding claim wherein the one or more components each has a dedicated self test unit.

6. A self test system according to any of claims 1 to 4, wherein a plurality of the one or more components communicate with a self test unit.

7. A self test system according to any preceding claim wherein the data from the self test is fed by a single data link to the summator.

8. A self test system according to any preceding claim, wherein the data from the self test units is fed by a plurality of separate data links to the summator.

9. A self test system according to any of claims 2 to 8 wherein the summator is a separate counter/adder component, or a micro-controller.

10. A self test system according to any of Claims 2 to 9, wherein the summator is or includes a subtractor component.

11. A self test system according to Claims 2 to 10 wherein the summator is part of a main microprocessor.

12. A self test system according to any of Claims 2 to 11, wherein data from the, or each component is delivered to the summator as a signal comprising a number of pulses.

13. A self test system according to Claim 12, wherein the pulses are identified as discrete numbers of pulses to the value of x^2 or as a prime number.

14. A self test system according to claim 12, wherein the number of pulses for components making up an AED are any of the following:

Electrode condition	$32^2 = 1024$ pulses
Battery on charge	$33^2 = 1089$ pulses
System condition	$34^2 = 1156$ pulses
Modem condition	$35^2 = 1225$ pulses

15. A self test system according to any preceding claim, wherein a self test for a component is triggered by a test having been carried out on another component.

16. A self test system according to any preceding claim wherein the test is activated by digital signal processor.

17. A self test system according to Claim 16, wherein the digital signal processor is activated by a signal from a server or base station in contact with the medical device.

18. A self test system according to any preceding claim, wherein the self test is activated by the medical device being placed in a base station for said device.

19. A self test system according to any preceding claim, wherein a self test involves testing the voltage across substantially all of the circuitry of the medical device.

20. A self test system according to Claim 16, wherein the test is carried out either at a first voltage of between 450V or a second voltage of 40V.

21. A self test system according to any preceding claim, wherein the indicator is a digital display that can display results for the summator or processor independently of one another.

22. A self test system according to Claim 21, wherein the processor reviews the results of the summator prior to the results being fed to the indicator.

23. A self test system according to Claims 21 or 22, wherein the number of pulses being fed to the summator is recorded.

24. A self test system according to Claim 23, wherein the number of pulses is measured against set parameters to provide an indication of whether one or more components are functioning as required.

25. A self test system according to any preceding claim, wherein the self test system tests the condition of the power source for the medical device, prior to testing other components.

26. A self test system according to any preceding claim, wherein the testing of components is based on testing a sample of signals over time or testing a defined number of signals for each component.

27. A self test system according to any preceding claim wherein the indicator is integral with said medical device.

28. A self test system according to any of claims 1 to 26, wherein the indicator is a separate component associated with said medical device.

29. A self test apparatus adapted for a medical device described herein with reference to and illustrated in the accompanying Figures 2 to 10.

30. A method of self testing a medical device said medical device being arranged to transmit information concerning components of said medical device to an indicator, wherein one or more components are caused to carry out a self test, the results of the self test are stored and on operation of said medical device are transmitted to a processor for analysis and display by said indicator.

31. A method according to claim 30, wherein the self test is a periodic or aperiodic self test, activated by a timing device.

32. A method according to claim 30 or claim 31, wherein information concerning said components is sent to a summator prior to being sent to a processor.